

Remarks

Claims 1, 2, 3, 4, 6, 7, 12, 14 and 16 have been amended. Claim 9 has been cancelled and new claims 17 and 18 have been added. Accordingly, claims 1-8 and 10-18 are pending in the application. Favorable consideration of the application is respectfully requested.

In the parent application, serial number 09/949,043, claims 1-16 were rejected under 35 U.S.C. 102(a) as being anticipated by United States Patent No. 5,388,525 to Bodkin et al. Claims 1-8 and 10-18 are believed to distinguish patentbly over Bodkin et al. for the following reasons.

Independent claim 1 is directed to a releasable retarder and distinguishes over Bodkin by reciting the retarder as including an operating mechanism operable in a release mode for moving the shoe beams inwardly, away from the running rails, from a home position in which the shoes are positioned to engage the railway car wheels to a release position in which the frictional force is released, allowing the railway car to move freely through the retarder, and operable in a service mode for moving the shoe beams outwardly, towards the running rails, from the home position to a service position. This allows insertion of at least one shimming element, whereby upon subsequent movement of the shoe beams by the operating mechanism toward the home position, the shimming element limits travel of the shoe beams such that the shoes are repositioned in an adjusted position outwardly of the home position, closer to the running rails, compensating for wear on the shoes.

Independent claim 12 also recites an operating mechanism that is operable in a release mode for moving shoe beams from a home position in which the shoes are positioned to engage the railway car wheels to a release position in which the frictional

force is released, and operable in a service mode for moving the shoe beams from the home position to a service position, allowing the insertion of a shimming element to compensate for wear on the shoes carried by the shoe beams. Claim 12 recites the operating mechanism as including a plurality of rams and a common operating member which couples the rams to the springs, for causing the springs to be compressed, as the shoe beams are moved from the home position to the release position by the operating mechanism, and a lever system coupling the operating member to the shoe beams, the lever system providing a mechanical advantage for compressing the springs as the shoe beams are moved from the home position towards the release position.

Independent claim 16 similarly recites an operating mechanism operable in a release mode for moving the shoe beams inwardly from a home position in which the shoes are positioned to engage the railway car wheels to a release position in which the bias force is released, allowing the railway car to move freely through the retarder, and at least one shimming element. Claim 16 further recites the operating mechanism operable in a service mode for moving the shoe beams outwardly from the home position to a service position, allowing the insertion of the shimming element to compensate for wear on the shoes carried by the shoe beams.

In accordance with applicant's invention, the operating mechanism, provides two distinct functions. When operating in a release mode, the shoe beams and the shoes carried thereby are moved inwardly, away from the running rails from a home position to a release position, releasing friction force to allow railcars to move through the retarder substantially unimpeded. Operating the operating mechanism in a service mode causes the

running rails to be moved in the opposite direction from the home position to a service position forcing the shoe beams and the bias structures outward from "gauge" (i.e., the rail to rail spacing for the running rails). This spaces a surface of the bias structure away from a frame rail, providing a gap that allows one or more shimming elements to be inserted between the frame and the bias structure so that upon subsequent movement of the shoe beams by the operating mechanism toward the home position, the shimming element limits travel of the shoe beams such that the shoes are repositioned in an adjusted position outwardly of the home position, closer to the running rails, compensating for wear on the shoes.

Thus, compensation for shoe wear in the retarder of the invention, can be provided by merely operating the hydraulic mechanisms to the service mode, inserting shimming elements along the extent of the retarder and then operating the hydraulic mechanism to return the shoe to the home position when the shimming elements are in place, a simple, yet effective arrangement and one that does not require the removal of the wear shoes or the bolts that secure the wear shoes to the shoe beams. This arrangement results in lower maintenance costs and simplification of maintenance procedures for maintaining the retarder operational. Moreover, the simplified maintenance procedure minimizes downtime for the classification yard, further reducing maintenance costs.

In known retarder systems, such as the one disclosed by Bodkin et al., it is necessary to replace the wear shoes (plates 90 shown in figure 12) at regular intervals, which requires additional maintenance steps including the removal of the wear shoes and associated mounting hardware, and subsequent mounting

of new wear shoes, requiring adjustment of the hook bolts in carrying out the wear shoe changing process.

New claims 17 and 18 are ultimately dependent upon claim 12. Claim 17 recites that each lever system includes at least one lever and at least one coupling member coupled to the lever, and that the coupling member is adapted to engage one of the spring packs as the shoe beams are moved from the home position toward the service position. Claim 18 recites that the coupling member is coupled between the lever and one of the shoe rails and repositions the one spring pack as the shoe rail is moved from the home position to the service position.

Therefore, in view of the distinctions noted and for the reasons indicated, it is submitted that claims 1, 12 and 16 clearly distinguish over Bodkin et al. and are patentable thereover. Claims 2-8, 10, 11 and claims 13-15, 17 and 18 which are dependent upon claims 1 and 12, respectively, are believed to be patentable with respective parent claims.

In summary, claims 1-8 and 10-18 are believed to be allowable for all of the reasons indicated. Therefore, favorable reconsideration of the application is respectfully requested. If the Examiner believes that prosecution of the application can be so expedited, the Examiner is invited to telephone the undersigned.

Respectfully submitted:

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